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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,471	09/30/2003	Martin Antoni	90706	. 5544
24628 WELSH & KA	7590 07/27/200 TZ_LTD	7	EXAM	INER
120 S RIVERS	IDE PLAZA		CHERRY, E	EUNCHA P
22ND FLOOR CHICAGO, IL			ART UNIT	PAPER NUMBER
•			2872	
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			MAIL DATE	DELIVERY MODE
			07/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/675,471	ANTONI ET AL.				
Office Action Summary	Examiner	Art Unit				
	EUNCHA P. CHERRY	2872				
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet wit	h the correspondence address				
A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATI  - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communication  - If the period for reply specified above is less than thirty (30) days  - If NO period for reply is specified above, the maximum statutory  - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	ION. FR 1.136(a). In no event, however, may a re on. , a reply within the statutory minimum of thirty period will apply and will expire SIX (6) MONT statute, cause the application to become AB/	ply be timely filed  (30) days will be considered timely.  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	02 May 2007.					
<u> </u>	This action is non-final.					
3) Since this application is in condition for al	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice un	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 1-50 is/are pending in the applic 4a) Of the above claim(s) is/are wit 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-7 and 37-39 is/are rejected. 7) ☐ Claim(s) 8-36 and 40-50 is/are objected to 8) ☐ Claim(s) are subject to restriction as	thdrawn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Exa 10)☒ The drawing(s) filed on 30 September 200 Applicant may not request that any objection t Replacement drawing sheet(s) including the c 11)☐ The oath or declaration is objected to by the	23 is/are: a)⊠ accepted or b) to the drawing(s) be held in abeyand correction is required if the drawing(	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119	٠.					
12) Acknowledgment is made of a claim for fo a) All b) Some * c) None of:  1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International B * See the attached detailed Office action for	ments have been received. ments have been received in Aperical priority documents have been sureau (PCT Rule 17.2(a)).	oplication No. <u>09/950,186</u> . received in this National Stage				
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview S	, ummary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-94	Paper No(s	)/Mail Date				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date	SB/08) 5) \( \bigcap \text{Notice of In} \) 6) \( \bigcap \text{Other: } \( \bigcap \)	formal Patent Application (PTO-152) —				

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#### DETAILED ACTION

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-7 and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyth (US Patent No. 4,333,446) in view of Laing et al (US Patent No. 3,806,209).

Regarding claims 1-7 and 38, Smyth discloses a focusing device (Figs. 1 and 2) for the radiation from a light source (sun), comprising a collector mirror (48) which is held by a mount (16) and which collects the light from the light source at its focus (see the shape of 48), in virtual or real terms, wherein said collector mirror can be adjusted or displaced in said mount via a bearing in such way that optical properties of the collector mirror remain at least approximately the same in the event of temperature changes (see column 2, lines 50-63). The bearing is designed in such way that said collector mirror

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can be displaced at least perpendicular to the optical axis in the region of its bearing (see Fig. 2). The mount is designed as a mounting ring in which said collector mirror with its bearing is held (see Fig. 2). A plurality of bearings are arranged, distributed over the circumference, in strengthening ribs of said mounting ring (see Fig. 2, 42). The bearings of the collector mirror are provided with elements, which permit movements of said collector mirror perpendicular an optical axis (see Fig. 2). The elements are designed as active adjusting units (inherent). The intended use recited in the preamble does not get patentable weight for claim 38. However, Smyth does not disclose automatically adjusted bearing that responses to thermal load. Laing et al discloses the automatically adjusted bearing that responses to thermal load (column 2, lines 3-11). It would have been obvious to one of ordinary skill in the art to use the bearing as taught by Laing et al for the purpose of obtaining radiation without any dissipation.

Regarding claims 37 and 39, Smyth in view of Laing et al discloses the claimed invention as set forth above except for the light source being plasma EUV. It would have been obvious to one of ordinary skill in the art to use the solar collector in a system where the light source is a plasma EUV, because

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using the solar collector of Smyth will result in getting signal that can be controlled individually verse as one unit.

## Allowable Subject Matter

- 3. Claims 8-36 and 40-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 4. The following is a statement of reasons for the indication of allowable subject matter: claims are allowable at least for the reason that the prior art does not teach or suggest the annular shells that are hold jointly in bearings on a mount designed as a mounting ring (claims 8-36) and the shell collector is a plurality of annular shells arranged at a radial distance from one another (claims 40-50) as set forth in the claimed combination.

### Response to Arguments

5. Applicant's arguments with respect to claims have been considered but found not persuasive. Applicant argues the prior art does not adjust positions of the mirror. Applicant is reminded that the combined art satisfy this limitation as set forth in the rejection above. Therefore, it appears that the rejection is still deemed proper.

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#### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUNCHA P. CHERRY whose telephone number is 571-272-2310. The examiner.can normally be reached on M-F 6:30-4:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

ÉUMCHA P. CHERRY Primary Examiner Art Unit 2872